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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/988,193

11/19/2001

Manuel Barbosa

11017-0003

8121

22902

7590

10/06/2006

CLARK & BRODY

1090 VERMONT AVENUE, NW

SUITE 250

WASHINGTON, DC 20005

EXAMINER

NGUYEN, XUAN LANT

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 10/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/988,193	BARBOSA, MANUEL	
	<b>Examiner</b>	<b>Art Unit</b>	
	Lan Nguyen	3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 4,6,7 and 20-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4,6,7 and 20-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>8/18/06</u>   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 4, 6, 7 and 20-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buchholz et al. in view of JP 63-45229, (from here on will be referred as Document '229).

Re: claim 4, Buchholz et al. show a backing plate for a drum brake assembly, as in the present invention, comprising: an abutment plate 4 comprising a first part surrounding bolt holes 16 configured to align with and be attached to an axle housing of a vehicle such that said axle housing may pass therethrough, as shown in figures 2 and 3, and a second part surrounding the anchor block 8 extending from said first part and configured to receive braking forces applied thereto by brake shoes 7, 7 during braking and transmit said braking forces to said axle housing through said first part, and a shielding plate 5 extending radially beyond said abutment plate and configured to shield brake components, wherein said shielding plate is configured to support said brake shoes and a hydraulic cylinder 9 for operating said brake shoes, said abutment and shielding plates are made of different material thicknesses to reduce brake noise and vibration. Buchholz lacks the damped steel for the shielding plate as required by the

claim. Document '229 teaches the concept of using damped steel in the construction of a shielding plate 10 in order to further reduce noise and vibration from braking operations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Buchholz's backing plate assembly to comprise the material of damped steel as taught by Document '229, since it is proven that damped steel is excellent in dampen noise and vibration as taught by Document '229.

Re: claim 6, Document '229 teaches the damped steel as claimed.

Re: claim 7, Buchholz shows abutment plate 4 made of thick steel.

Re: claim 20, Buchholz et al. show a drum brake assembly, as in present invention, comprising: a shielding plate 5 made of steel, said shielding plate being configured to support and shield brake components including drum brake shoes 7, 7 and a hydraulic cylinder 9 for operating said drum brake shoes, an anchor block 8 for engaging ends of said brake shoes, and an abutment plate 4 having a first part configured to align with be attached to an axle housing of a vehicle such that said axle housing may pass therethrough, as shown in figures 2 and 3, and a second part extending from said first part and engaging said anchor block, as shown in figure 1, to receive braking forces applied thereto by said brake shoes during braking and to transmit said braking forces to said axle housing through said first part, said abutment and shielding plates being made of different material thicknesses in order to reduce noise and vibration. Buchholz lacks the different materials for the shielding plate and the abutment plate as required by the claim. Document '229 teaches the concept of using damped steel in the construction of a shielding plate 10 in order to further reduce

noise and vibration from braking operations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Buchholz's brake assembly to comprise the material of damped steel in the construction of the shielding plate as taught by Document '229, since it is proven that damped steel is excellent in dampen noise and vibration as taught by Document '229. As modified, the shielding plate made of damped steel and the thick steel abutment plate would comprise different materials.

Re: claim 21, Document '229 teaches the damped steel as claimed.

Re: claim 22, Buchholz shows abutment plate 4 made of thick steel.

Re: claims 23 and 24, the thicknesses of the steel and the damped steel are considered design choices and would depend on the requirements of each application to dampen the required vibration and noise. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified Buchholz's brake assembly to comprise the abutment plate and shielding plate with certain thicknesses in order to satisfy different requirements of each application to dampen the required vibration and noise.

### ***Response to Arguments***

3. Applicant's amendment has overcome the cited reference of Kaneshiro et al. A new ground of rejection is presented above.

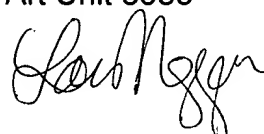
**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lan Nguyen whose telephone number is (571) 272-7121. The examiner can normally be reached on Monday through Friday, 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan can be reached on (571) 272-6786. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lan Nguyen  
Primary Examiner  
Art Unit 3683

 9/25/06